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AMIN & TUROCY, LLP 24TH FLOOR, NATIONAL CITY CENTER 1900 EAST NINTH STREET CLEVELAND, OH 44114			TRUONG, CAM Y T	
			ART UNIT	PAPER NUMBER
			2162	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/693,090

Applicant(s)

KRISHNAN ET AL.

Examiner

Cam Y T. Truong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicant has amended claims 1, 5, 9, 14, 16, 24, and 31 in the amendment filed on 5/26/2005. Claims 1-31 are pending in this Office Action.

Response to Arguments

2. Applicant's arguments with respect to claims 1-31 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argued on pages 13-15 that Bhatt does not teach a file associated with one or more unstructured properties; an item being a structured object representation of the file".

In response to applicant's argument, Bhatt does not teach a file associated with one or more unstructured properties. Bhatt teaches a XML document associated with attributes such tile of book, first name and last name. Since these attributes are not in a structured object such as SybXML stream object; thus, these attributes are called unstructured attributes. Unstructured attributes are presented as unstructured properties. The XML document can be represented as a file (fig. 4, col. 12, lines 35-45; col. 11, lines 56-57).

In response to applicant's argument, Bhatt does not teach an item being a structured object representation of the file. Bhatt teaches a tree that has one or more nodes as attributes and is a structured object representation of the XML document. The tree is represented as an item. Nodes of a tree are presented as structured properties (fig. 4A, col. 11, lines 54-58; col. 13, lines 51-53).

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In view of the above, the examiner contends that all limitations as recited in the claims have been addressed in this Action.

For the above reason, examiner believed that rejection of the last office action was proper.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bhatt et al (or hereinafter "Bhatt") (US 6799184) in view of Ohta et al (or hereinafter "Ohta") (US 6868423).

As to claim 1, Bhatt teaches a file transformation system (Abstract, col. 13, lines 50-60), comprising:

"at least one file associated with one or more unstructured properties" as a XML document associated with attributes such tile of book, first name and last name. Since these attributes are not in a structured object such as SybXML stream object; thus, these attributes are called unstructured attributes. Unstructured attributes are presented as unstructured properties (fig. 4, col. 12, lines 35-45; col. 11, lines 56-57);

"an item that has one or more structured properties and is a structured object representation of the file" a tree that has one or more nodes as attributes and is a

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structured object representation of the XML document. The tree is represented as an item. Nodes of a tree are presented as structured properties (fig. 4A, col. 11, lines 54-58; col. 13, lines 51-53).

Bhatt does not explicitly teach the claimed limitation "a file property handler that manipulates at least one of the following: the unstructured properties based on changes to the structured properties and the structured properties based on changes to the unstructured properties".

Ohta teaches creating, from XML data, a hierarchical unit tree as a tree structure in which attributes of the XML data are set as a leaf node and a non-leaf node. When adding a change to the hierarchical unit tree, the system converts the XML data so as to reflect the change added to the hierarchy unit tree. Adding a change to the hierarchical unit tree includes setting a plurality of nodes as child nodes of a node newly created on the same hierarchy as the plurality of nodes having the same non-leaf node as a parent; changing attribute names of a plurality of nodes to the same attribute name. When converting XML data as to reflect a change to the hierarchical unit tree, the system has included an file property handler to convert attributes of XML data based on changes such as changing attribute names of a plurality of nodes and setting a plurality of nodes as child node (col. 7, lines 27-55).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Ohta's teaching of creating, from XML data, a hierarchical unit tree as a tree structure in which attributes of the XML data are set as a leaf node and a non-leaf node. When adding a change to the hierarchical unit tree, the

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system converts the XML data so as to reflect the change added to the hierarchy unit tree; Adding a change to the hierarchical unit tree includes setting a plurality of nodes as child nodes of a node newly created on the same hierarchy as the plurality of nodes having the same non-leaf node as a parent; changing attribute names of a plurality of nodes to the same attribute name to Bhatt's system in order to provide means capable of solving trouble in managing the data formats and the procedures and capable of carrying out advanced preprocessing more intuitively in the preprocessing for and further provide a method capable of handling data aggregates of various types unitarily and capable of dynamically changing the data aggregate and the data structure by reflecting an interaction from a user in the event of the preprocessing for the data mining.

As to claim 2, Bhatt teaches the claimed limitation "the file property handler performs at least one of an extraction and a transformation in order to promote the unstructured properties to the structured properties" as XML data transform module converts the XML document that includes attributes into a transformed object referred to as a SybXMLStream data structure or object. During transformation, each element of an XML document is treated as a node or leaf. The above information shows that the XML data transform module manipulate the attributes of the XML document in accordance with one or more structured nodes associated with a structured object environment. The XML data transform module is represented as a file property handler. Nodes of a tree are presented as structured properties. Converting XML attributes to nodes of a

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tree structure implies to promote the unstructured properties to the structured properties (fig. 4A, col. 11, lines 54-58; col. 13, lines 51-53).

As to claim 3, Bhatt teaches the claimed limitation “the file property handler performs at least one of an extraction and a transformation in order to demote the structured properties to the unstructured properties” as the XML store engine uses the link index, OID-Offset table and SybNode data to convert the applicable portion of the transformed object back into XML format. To convert the portion of the transformed object back into XML format is represented as to demote. The above information implies that the XML store engine performs a transformation in order to convert nodes in tree back to attributes of XML document into XML format (col. 23, lines 45-49).

As to claim 7, Bhatt teaches the claimed limitation “the file property handler facilitates a demotion operation when an application queries for and modifies items employing a structured store Application Programming Interface (API) that manipulates a file-backed item” as receiving a query from an application (client) for converting transformed object back to XML document, the XML store engine uses the link index, OID-Offset table and SybNode data to convert the applicable portion of the transformed object back into XML format. The system allows client to request many stored transformed objects in relational database to convert back to its original formal by employing an API that manipulates the transformed object as the file-backed item. Thus, the system can receives a request from client for modifying objects as items in a

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database (col. 23, lines 28-30; col. 23, lines 45-51; col. 14, lines 45-50; col. 10, lines 26-30).

As to claim 13, Bhatt teaches the same claimed limitation subject matter in claim 1, Bhatt further teaches the claimed limitation "computer readable medium having computer readable instructions stored thereon for implementing the file property handler" as a computer software system 200 is stored in system memory for implementing the XML store engine 340. The XML store engine 340 is represented as the file property handler. The system memory is represented as computer readable medium (col. 9, lines 41-45; col. 11, lines 32-40).

5. Claims 4, 5, 6, 8, 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bhatt et al (US 6799184) in view of Ohta and further in view of Inohara et al (orhereinafter "Inohara") (US 6385606).

As to claim 4, Bhatt teaches the claimed limitation "a file property manager to facilitate communications between applications working with unstructured property stream/file and applications working with a structured object representation of a file". Inohara teaches format conversion control unit 100 to facilitate communication between applications such as 101, 150, 152 for the conversion originating file 130 and applicants such 152, 153, 102 (fig. 1).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Inohara's teaching of format conversion control unit

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100 to facilitate communication between applications such as 101, 150, 152 for the conversion originating file 130 and applicants such 152, 153, 102 to Bhatt's system in order to facilitate communication between applications without conflicting during converting a file form one format to another format.

As to claim 5, Bhatt discloses the claimed limitation subject matter in claim 1, except the claimed limitation "the file property handler facilitates a promotion operation when a file API based application) modifies properties by updating a file stream for a structured object store item". Inohara teaches when a user intends to access the hello.html by using the WWW browser 820, the WWW browser 820 issues an open API for the preparation of reading the file hello.html. In this case, the file system determines a conversion program and converts the originating file into the conversion destination file to obtain the contents of the file hello.html. With the following read API for the hello.html, the WWW browser can obtain the contents of the file hello.doc as the file hello.html having a different format. During converting, the file name of the hello.doc is converted into hello.html and file extension of the hello.doc is converted into hello.html. The above information shows that the system updating attributes of the hello.doc by updating content of hello.html (col. 16, lines 52-65; col. 8, lines 61-65; col. 8, lines 37-40).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Inohara's teaching of updating file extension and

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filename of a file by using a content of another file to Bhatt's system in order to convert a unstructured file into format of an object quickly and efficiently.

As to claim 6, Bhatt teaches the claimed limitation "the structured object store item is a file-backed item" as the structure of an exemplary SybXMLStream object generated by transformation of a particular XML document. As defined in specification "a file-backed item" is used to refer to a structured object representation of the file in an object store (page 2, lines 10-11). The SybXMLStream object is used to refer to a structured object representation of a particular XML document. Thus, the SybXMLStream object is represented as a file-backed item (col. 15, lines 52-55).

As to claim 8, Bhatt discloses the claimed limitation subject matter in claim 1, except the claimed limitation "the file property handler is registered to process one or more selected file extensions". Inohara teaches the file system determines a conversion program 823 is used to convert file hello.doc into hello.html. The above information shows that the conversion program 823 is registered to process file extensions.

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Inohara's teaching of file system determines a conversion program 823 is used to convert file hello.doc into hello.html to Bhatt's system in order to change the format of a file into another format and further to indicate a format type of a file to a user.

As to claim 9, Bhatt discloses the claimed limitation subject matter in claim 1, except the claimed limitation "the file property manager on receiving a notification of an unstructured byte stream representation of the file having been modified calls a file property handler for it with a pointer to the byte stream of the file to be promoted". Inohara teaches a change in the conversion originating file at the computer 10 is immediately transferred to the computer 10'. Transferring the change in the conversion originating file shows a notification of file that is modified (col. 15, lines 29-31).

It would have been obvious to a person of a ordinary skill in the art at the time the invention was made to apply Inohara's teaching of a change in the conversion originating file at the computer 10 is immediately transferred to the computer 10' to Bhatt's system in order to allow users to update data file into their own computer system.

As to claim 12, Bhatt discloses the claimed limitation subject matter in claim 1, except the claimed limitation "an application programming interface (API) that allows applications to modify a file-backed item". Inohara teaches the application program interface API that allows applications such as 101 and 102 to modify file name hello.html to hello.doc by using a conversion program. Filename such as hello.html is represented as a file-backed item (col. 16, lines 54-61).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Inohara's teaching of the application program interface

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API that allows applications such as 101 and 102 to modify file name hello.html to hello.doc by using a conversion program to Bhatt's system in order to allow many users to convert a format of a file into another format for viewing/reading in their own computer system.

6. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bhatt et al (US 6799184) in view of Ohta and further in view of Abdelnur et al (or hereinafter "Abdelnur") (US 6429882).

As to claim 10, Bhatt teaches the claimed limitation "that defines methods for promotion and demotion" as the XML store engine is used to transform from XML document to structured object and also is used to transform back from the structured object to XML document. To transform from XML document to structured object is represented as to promotion. To transform from structured object to XML document is represented as demotion. The above information shows that the system has defined methods to promotion and demotion for transforming the XML document and structured object f (col. 11, lines 40-59; col. 23, lines 45-49).

Bhatt does not explicitly teach the claimed limitation "the file property handler is associated with an abstract class". Abdelnur teaches an abstract class includes methods for converting the properties of a file into a properties object (col. 14, lines 35-55).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Abdelnur's teaching of an abstract class includes

methods for converting the properties of a file into a properties object to Bhatt's system and Ohta's system in order to provide the ability to perform some action on object and /or its properties for converting proprieties of a file into a properties object environment.

As to claim 11, Bhatt discloses the claimed limitation subject matter in claim 10, except the claimed limitation " the abstract class includes at least one of a BaseFilePropertyHandler, a promote method, a demote method, a first promote method, a store serialized item method, and E. retrieve serialized item method". Abdelnur teaches an abstract class includes methods for converting the properties of a file into a properties object (col. 14, lines 35-55).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Abdelnur's teaching of an abstract class includes methods for converting the properties of a file into a properties object to Bhatt's system and Ohta's system in order to provide the ability to perform some action on object and /or its properties for converting proprieties of a file into a properties object environment.

7. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bhatt in view of Fitzsimons et al (or hereinafter "Fitzsimons") (US 6708189)..

As to claim 14, Bhatt teaches system to facilitate data transformation (Abstract, col. 11, lines 45-60), comprising:

"means for exposing unstructured file properties to a structured store application" as exposing attributes of XML document to a database application. Since attributes of

XML document do not have format of a database application; according this application, attributes of XML document are unstructured file properties (col. 11, lines 45-60; fig. 4A; col. 10, lines 26-30);

“means for transforming the unstructured file properties into structured item properties associated with the structured store application” transforming attributes of XML document into nodes of an object associated with database application (fig. 4A, col. 11, lines 50-60; col. 10, lines 26-32);

“means for updating the structured item properties in the structured store application” as when transforming attributes of XML document into nodes of an object. Nodes of an object are updated to contain element of XML document in the database application (fig. 4B; col. 11, lines 50-60; col. 10, lines 26-32);

“the structured item properties are related to an item that is an structured object representation of the file” as a tree that has one or more nodes as attributes and is a structured object representation of the XML document. The tree, which is represented as an item, is represented as a structured object representation of the XML document. Nodes of a tree are presented as structured properties. The XML document is represented as a file (fig. 4A, col. 11, lines 54-58; col. 13, lines 51-53).

Bhatt does not explicitly teach the claimed limitation “the unstructured file properties are related to a file that is an unstructured byte stream”. Fitzsimons teaches file names and headers are associated to a file that means an assembly of bytes (col. 2, lines 52-55).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Fitzsimons's teaching of file names and headers are associated to a file that means an assembly of bytes to Bhatt's system in order to convert any bytes of files to a different format so that a user can read or view file easily.

As to claim 15, Bhatt teaches the claimed limitation "means for transforming the structured item properties into unstructured file properties" as transforming the nodes of transformed object back to attributes of XML document (fig. 4B; col. 23, lines 45-50).

8. Claims 16, 18, 19, 21 are rejected under 35 U.S.C. 102(e) as being unpatentable over Inohara et al (or hereinafter "Inohara") (US 6385606) in view of Ohta et al (or hereinafter "Ohta") (US 6868423).

As to claim 16, Inohara teaches a method to facilitate data item migration, comprising:

"modifying an file in a structured store namespace via utilizing a file API based application" as converting the conversion originating file into the conversion destination file from file API based application in a file system 100. The file system 100 manages and reserves data in the unit called a file. One or more conversion originating file is stored the secondary storage unit 11, each file being discriminated by a file name. The above information shows that the file system has included a namespace for each file (col. 18, lines 12-15; col. 5, lines 60-65); and

“promoting one or more properties associated with the file” as converting extension of a conversion originating file to a extension of a conversion destination file and converting filename of a conversion originating file to a filename of a conversion destination file, the extension and file name of the conversion originating file are associated with a namespace of the conversion originating file (col. 8, lines 38-41; col. 9, lines 15-17).

Inohara does not explicitly teach the claimed limitation “to accordingly update properties associated with an item that is associated with the structured store namespace, the item is a structured object representation of the file in an object store”.

Ohta teaches creating, from XML data, a hierarchical unit tree as a tree structure in which attributes of the XML data are set as a leaf node and a non-leaf node. When adding a change to the hierarchical unit tree, the system converts the XML data so as to reflect the change added to the hierarchy unit tree. Adding a change to the hierarchical unit tree includes setting a plurality of nodes as child nodes of a node newly created on the same hierarchy as the plurality of nodes having the same non-leaf node as a parent; changing attribute names of a plurality of nodes to the same attribute name. The unit tree is stored in history file 120. The unit tree is represented as item. The history file is represented as an object store (col. 7, lines 27-55; col. 9, lines 40-45).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Ohta's teaching of creating, from XML data, a hierarchical unit tree as a tree structure in which attributes of the XML data are set as a leaf node and a non-leaf node. When adding a change to the hierarchical unit tree, the

system converts the XML data so as to reflect the change added to the hierarchy unit tree; Adding a change to the hierarchical unit tree includes setting a plurality of nodes as child nodes of a node newly created on the same hierarchy as the plurality of nodes having the same non-leaf node as a parent; changing attribute names of a plurality of nodes to the same attribute name to Bhatt's system in order to provide means capable of solving trouble in managing the data formats and the procedures and capable of carrying out advanced preprocessing more intuitively in the preprocessing for and further provide a method capable of handling data aggregates of various types unitarily and capable of dynamically changing the data aggregate and the data structure by reflecting an interaction from a user in the event of the preprocessing for the data mining.

As to claim 18, Inohara teaches the claimed limitation "registering a file property handler to facilitate promoting or demoting the one or more properties" as the conversion program 203 indicates a name of the program for converting a conversion originating file having a format into a conversion destination file having a format. The above information shows that the conversion program 203 is registered to facilitate converting. Converting format of the originating file to the format of the destination file is represented promoting the property (col. 6, lines 32-37).

As to claim 19, Inohara teaches the claimed limitation "de-queuing a change item" as a deletion candidate table 124 stores enumerated conversion destination files,

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and is used for deleting a conversion destination files. When a conversion destination file is deleted from the deletion candidate table 124, the deletion candidate table is called de-queuing a conversion destination file. In this case, conversion destination file is called a change item (col. 7, lines 20-21; col. 7, lines 61-62).

As to claim 21, Inohara teaches the claimed limitation "morphing an item's type/structure or changing an item type/structure" as when converting an originating file to a destination file, the format and structure of the originating file are changed. The format of the file is represented as type (col. 18, lines 10-22).

9. Claims 17, 25-27, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inohara et al (or hereinafter "Inohara") (US 6385606) in view of Ohta and further in view of Bhatt et al (US 6799184).

As to claim 17, Inohara discloses claimed limitation subject matter in claim 16, except the claimed limitation "demoting one or more properties associated with the item to be in accordance with the file API based application". Bhatt teaches that after the XQL parser of the XQL engine receives and parses a query received from an application, the XML store engine uses the link index, OID-Offset table and SybNode data to convert the application portion of the transformed object back into XML format. The resulting XML document is returned to application in respond to query. The above information shows, the system demotes one of potion or node of transformed object

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back to XML format. Node is represented as a property (fig. 4A, col. 23, lines 28-30; col. 23, lines 45-51).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Bhatt's teaching of converting the application portion of the transformed object back into XML format to Inohara's system in order to allow a user to get back original version file format for viewing in their own computer system.

As to claim 25, Inohara teaches the claimed limitation "determining the item for updates to parts of the item" as converting file extension and file name of a file indicates the system determines the file as the item (col. 8, lines 1-5; col. 8, lines 38-41; col. 9, lines 13-17).

As to claim 26, Inohara teaches the claimed limitation "querying an item store for a file property handler registration" as (col. 8, lines 7-12; col. 6, lines 20-25).

As to claim 27, Inohara teaches the claimed limitation "loading the file property handler into a cache" as storing conversion program into a cache memory (fig. 1, col. 5, lines 50-52).

As to claim 29, Inohara teaches the claimed limitation "reading changes from an item and updating file properties" as (col. 15, lines 29-31; col. 9, lines 14-16; col. 8, lines 61-65).

As to claim 30, Inohara teaches the claimed limitation "at least one of sending the item changes to the store" as a change in the conversion originating file 130 at the computer 10 is immediately transferred to the computer 10 (col. 15, lines 29-31) and "closing a stream" as the first file is opened in a write mode by using an open API and closed by using a close API (col. 9, lines 37-40).

10. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inohara et al (or hereinafter "Inohara") (US 6385606) in view of Ohta and further in view of Lee et al (or hereinafter "Lee") (US 6061696).

As to claim 20, Inohara discloses the claimed limitation subject matter in claim 16, except the claimed limitation "retrieving a structured item for a selected item path". Lee teaches retrieving a file from a path to convert the file from its native format to a web-publishable format (col. 8, lines 1-4).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Lee's teaching of retrieving a file from a path to convert the file from its native format to a web-publishable format to Inohara's system in order to allow users to view, and manipulate the content parts used in creating multimedia document rapidly and interactively and further provide fastest retrieving by using object path.

11. Claim 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inohara et al (or hereinafter "Inohara") (US 6385606) in view of Ohta and further in view of Fitzsimons et al (or hereinafter "Fitzsimons") US 6708189).

As to claim 22, Inohara teaches the claimed limitation "updating an item" as converting an originating file (col. 18, lines 11-12). Inohara does not explicitly teach the claimed limitation "automatically extracting properties". Fitzsimons teaches re-formats the data automatically. The system functions to convert a data file created under a first format into a corresponding data file under a second format. To convert a data file from one format to another, the processor 46 reads the contents of the file and extract specific items such as tile of a file and author of a file. The above information implies that the processor 46 automatically extract tile and author of a file. Tile and author of a file are presented as properties (col. 2, lines 56-62; col. 7, lines 34-36; col. 4, lines 44-47).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Fitzsimons's teaching of automatically re-formats the data and automatically extracting the data for reformatting to Inohara's system in order to convert a data file created under one format into a corresponding data file under second format quickly without user's interaction and save time or avoid time consuming processes during converting format of a file.

As to claim 24, Inohara discloses the claimed limitation subject matter in claim 16, except the claimed limitation “applying changes to the item to the structured object store”. Fitzsimons teaches the information extracted from the parsed file may be manipulated during reformatting by the processor 46. Manipulation may include converting date to string; date and time conversion. Once data has been manipulated it may be stored as a reference named object into a dataset. Since the extracted information of the parsed file such as data and time are manipulated; thus, the parsed file are manipulated or changed. Since a reference named object is stored in a dataset; thus, when applying changes such as manipulated date and time to parsed file, the system applies changes to dataset too. The dataset is represented as a store (col. 7, lines 64-67; col. 8, lines 1-10; col. 10, lines 32-40).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Fitzsimons’ s teaching of the information extracted from the parsed file may be manipulated during reformatting by the processor 46. Manipulation may include converting date to string; date and time conversion. Once data has been manipulated it may be stored as a reference named object into a dataset to Inohara’s system in order to converting properties of a file into format of an object.

12. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inohara et al (or hereinafter “Inohara”) (US 6385606) in view of Ohta and further in view of Ahluwalia (US 6728685).

As to claim 23, Inohara discloses the claimed limitation subject matter in claim 16, except the claimed limitation "marking modified parts of an item as promoted".

Ahluwalia teaches the change flag attribute indicates that data has been changed (col. 26, lines 18-19).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Ahluwalia's teaching of the change flag attribute indicates that data has been changed to Inohara's system in order to help a user to monitor status of a file for updating file efficiently.

13. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inohara et al (or hereinafter "Inohara") (US 6385606) in view of Ohta and further in view of Bhatt et al (or hereinafter "Bhatt") (US 6799184) and Fitzsimons et al (or hereinafter "Fitzsimons") US 6708189).

As to claim 28, Inohara and Bhatt disclose the claimed limitation subject matter in claim 17, except the claimed limitation "automatically identifying fields to be updated". Fitzsimons teaches re-formats the data automatically. The system functions to convert a data file created under a first format into a corresponding data file under a second format. To convert a data file from one format to another, the processor 46 reads the contents of the file and extract specific items such as tile of a file and author of a file. The above information implies that the processor 46 automatically extract tile and

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author of a file. Tile and author of a file are presented as properties (col. 2, lines 56-62; col. 7, lines 34-36; col. 4, lines 44-47).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Fitzsimons's teaching of automatically re-formats the data and automatically extracting the data for reformatting to Inohara's system and Bhatt's system in order to convert a data file created under one format into a corresponding data file under second format quickly without user's interaction and save time or avoid time consuming processes during converting format of a file.

14. Claim 31 is rejected under 35 U.S.C. 103(b) as being unpatentable over Inohara et al (or hereinafter "Inohara") (US 6385606) in view of Bhatt.

As to claim 31, Inohara teaches a computer readable medium having a data structure stored thereon (fig. 2, col. 5, lines 47-52), comprising:

"a first data field related to an unstructured property associated with file data" as conversion table 120 includes a conversion originating format field related to an file name of an originating file 130 associated with file ID as file data. Since the file name of the originating file 130 does not contain the format of a destination file; thus, the file name of the originating file 130 is represented as an unstructured file name. The unstructured file name is represented as an unstructured property. The conversion originating format field is represented as a first data field. The conversion 120 is represented as a data structure (figs. 1&2, col. 6, lines 20-22);

“a second data field related to a structured property associated with structured item data” as conversion table 120 includes conversion destination format field 202 related to an file name of destination file 131 associated with file ID of the destination file 131. The File name of the destination file is represented as a structured property associated with structured file 131. The structured file 131 is represented as structured item data. The conversion destination format field 202 is represented as a second data field (figs. 1&2, col. 6, lines 21-23; col. 8, lines 61-65);

“and a third data field that is employed to correlate the unstructured property data with the structured property data” as conversion table 120 also includes a conversion program field 203 that is employed to convert or correlate the file name of the originating file 130 with the file name of the destination file 131 (figs. 1&2, col. 6, lines 21-23; col. 8, lines 61-65).

Inohara does not explicitly teach the claimed limitation “the item data is related to an item that is a structured object representation of a file, which is related to the file data”. Bhatt teaches the XML data transform module converts the XML document that includes attributes into a transformed object referred to as a SybXMLStream data structure or object. During transformation, each element or attribute of an XML document is treated as a node or leaf. The SybXML stream data structure is represented as a structured object representation of a XML document (fig. 4A, col. 11, lines 54-58; col. 13, lines 51-53).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Bhatt’s teaching of converting the XML document that

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includes attributes into a transformed object referred to as a SybXMLStream data structure or object to Inohara's system in order to provide a fast, random access data to structures within it and further maintain easily, as it does not need to be rewritten each time XML definition is changed.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Contact Information


16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam Y T Truong whose telephone number is. (571) 272-4042. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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